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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,572	08/23/2001	Masao Hagiwara	VX012339	7900

21369 7590 07/11/2003

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ALEXANDRIA, VA 22314

EXAMINER

RODRIGUEZ, ISABEL

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,572

Applicant(s)

HAGIWARA, MASAO

Examiner

Isabel Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/23/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Okawa et al. (US 6,157,160).

Okawa et al. discloses a solenoid driving device (fig. 1) comprising a solenoid (1a), switch means (12) for feeding an electric current from a power source intermittently to said solenoid, and a current detector (2) connected between said solenoid and said switch means for detecting the electric current to flow through said solenoid.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al. in further view of Endo et al.

Okawa et al. discloses a solenoid driving device including the limitations of claim 1.

Okawa et al. does not disclose that the current sensor is disposed within the controller. Endo et al. discloses a solenoid driving device (fig. 6) comprising a solenoid, a switch means and a

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current sensor wherein the current sensor is disposed within the controller (13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the current detector as part of the controller because it would provide the convenience for having a single unit in which all parts are mounted and being able to provide sensing through the terminal. Furthermore, it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japiske, 86, USPQ 70.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okawa et al. in view of Endo et al.

Okawa et al. discloses a solenoid driving device (fig. 1) comprising a solenoid (1a) , switch means (12) for feeding an electric current from a power source intermittently to said solenoid, and a current detector (2) connected between said solenoid and said switch means for detecting the electric current to flow through said solenoid wherein the switch means is disposed in a controller. Okawa et al. does not disclose that the current sensor is disposed within the controller. Endo et al. discloses a solenoid driving device (fig. 6) comprising a solenoid, a switch means and a current sensor wherein the current sensor is disposed within the controller (13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the current detector as part of the controller because it would provide the convenience for having a single unit in which all parts are mounted and being able to provide sensing through the terminal. Furthermore, it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japiske, 86, USPQ 70.

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Conclusion

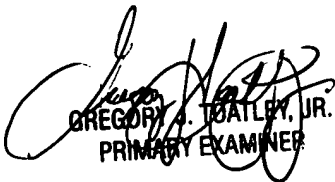
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isabel Rodriguez whose telephone number is 703-305-4761. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7704 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

IR

June 27, 2003


GREGORY A. TEATLEY, JR.
PRIMARY EXAMINER